

WHAT IS CLAIMED IS:

1 1. A method of minimizing coupling capacitance interference between a first
2 signal path and a second signal path in an electrical system comprising:
3 transmitting a first digital signal along the first signal path;
4 transmitting a second digital signal along the second signal path wherein the second
5 digital signal has a value opposite a value of the first digital signal;
6 inverting the value of the first digital signal along the first signal path to match the
7 value of second digital signal; and
8 re-inverting the first digital signal along the first signal path at a final destination of
9 the first signal path.

1 2. The method of minimizing coupling capacitance interference between a first
2 signal path and a second signal path in an electrical system of claim 1 further comprising:
3 storing the second signal in a buffer along the second signal path.

1 3. The method of minimizing coupling capacitance interference between a first
2 signal path and a second signal path in an electrical system of claim 2 wherein inverting the
3 first digital signal takes place when storing the second signal.

1 4. The method of minimizing coupling capacitance interference between a first
2 signal path and a second signal path in an electrical system of claim 1 further comprising:
3 repeating the first digital signal along the first path; and
4 repeating the second digital signal along the second path.

1 5. The method of minimizing coupling capacitance interference between a first
2 signal path and a second signal path in an electrical system of claim 2 further comprising:
3 a first signal repeater that repeats the first digital signal after the first digital signal is
4 inverted; and
5 a second signal repeater that repeats the second digital signal after the second digital
6 signal is stored.

1 6. The method of minimizing coupling capacitance interference between a first
2 signal path and a second signal path in an electrical system of claim 1 wherein
3 the value of the first digital signal and the value of the second digital signal are the
4 same for at least one half of the first signal path.

1 7. The method of minimizing coupling capacitance interference between a first
2 signal path and a second signal path in an electrical system of claim 2 wherein
3 the value of the first digital signal and the value of the second digital signal are the
4 same for at least one half of the first signal path.

1 8. The method of minimizing coupling capacitance interference between a first
2 signal path and a second signal path in an electrical system of claim 3 wherein
3 the value of the first digital signal and the value of the second digital signal are the
4 same for at least one half of the first signal path.

1 9. The method of minimizing coupling capacitance interference between a first
2 signal path and a second signal path in an electrical system of claim 4 wherein
3 the value of the first digital signal and the value of the second digital signal are the
4 same for at least one half of the first signal path.

1 10. The method of minimizing coupling capacitance interference between a first
2 signal path and a second signal path in an electrical system of claim 5 wherein
3 the value of the first digital signal and the value of the second digital signal are the
4 same for at least one half of the first signal path.

1 11. The method of minimizing coupling capacitance interference between a first
2 signal path and a second signal path in an electrical system of claim 6 wherein
3 the value of the first digital signal and the value of the second digital signal are the
4 same for at least one half of the first signal path.

12. An electrical transmission circuit comprised of:
a sending device transmitting a first digital signal having a value along a first signal
path;
a second device transmitting a second digital signal having a value opposite the value
of the first digital signal along a second signal path;
an inverter device that inverts the value of the first digital signal to match the value of
the second digital signal; and
a receiving device that receives the first digital signal and the second digital signal
wherein the receiving device inverts the value of the first digital signal.

13. The electrical transmission circuit of claim 12 further comprised of:
a buffer device along the second signal path that stores the value of the second digital
signal.

14. The electrical transmission circuit of claim 13 wherein the inverter is placed
opposite the buffer device.

15. The electrical transmission circuit of claim 12 further comprised of:
a first repeater device that repeats the first digital signal along the first signal path;
and
a second repeater device that repeats the second digital signal along the second signal
path.

16. The electrical transmission circuit of claim 13 further comprised of:
a first repeater device that repeats the first digital signal after the first digital signal is
inverted; and
a second repeater devices that repeats the second digital signal after the second digital
signal is stored.

17. The electrical transmission circuit of claim 12 wherein the value of the first
digital signal and the value of the second digital signal are the same for at least one half of the
first signal path.

1 18. The electrical transmission circuit of claim 13 wherein the value of the first
2 digital signal and the value of the second digital signal are the same for at least one half of the
3 first signal path.

1 19. The electrical transmission circuit of claim 14 wherein the value of the first
2 digital signal and the value of the second digital signal are the same for at least one half of the
3 first signal path.

1 20. The electrical transmission circuit of claim 15 wherein the value of the first
2 digital signal and the value of the second digital signal are the same for at least one half of the
3 first signal path.

1 21. The electrical transmission circuit of claim 16 wherein the value of the first
2 digital signal and the value of the second digital signal are the same for at least one half of the
3 first signal path.

1 22. An apparatus of minimizing coupling capacitance interference between a first
2 signal path and a second signal path in an electrical system comprised of:

- 3 means for transmitting a first digital signal along the first signal path;
- 4 means for transmitting a second digital signal along the second signal path wherein
- 5 the second digital signal has a value opposite a value of the first digital signal;
- 6 means for inverting the value of the first digital signal along the first signal path to
- 7 match the value of second digital signal; and
- 8 means for re-inverting the first digital signal along the first signal path at a final
- 9 destination of the first signal path.

1 23. The apparatus of minimizing coupling capacitance interference between a first
2 signal path and a second signal path in an electrical system of claim 22 further comprised of:
3 means for storing the second digital signal in a buffer along the second signal path.

1 24. The apparatus of minimizing coupling capacitance interference between a first
2 signal path and a second signal path in an electrical system of claim 23 wherein the means for
3 inverting the first digital signal takes place when storing the second digital signal.

1 25. The apparatus of minimizing coupling capacitance interference between a first
2 signal path and a second signal path in an electrical system of claim 22 further comprised of:
3 means for repeating the first digital signal; and
4 means for repeating the second digital signal.

1 26. The apparatus of minimizing coupling capacitance interference between a first
2 signal path and a second signal path in an electrical system of claim 23 further comprised of:
3 means for repeating the first digital signal after inverting the first digital signal; and
4 means for repeating the second digital signal after storing the second digital signal.

1 27. The apparatus of minimizing coupling capacitance interference between a first
2 signal path and a second signal path in an electrical system of claim 22 wherein the value of
3 the first digital signal and the value of the second digital signal are the same for at least one
4 half of the first signal path.

1 28. The apparatus of minimizing coupling capacitance interference between a first
2 signal path and a second signal path in an electrical system of claim 23 wherein the value of
3 the first digital signal and the value of the second digital signal are the same for at least one
4 half of the first signal path.

1 29. The apparatus of minimizing coupling capacitance interference between a first
2 signal path and a second signal path in an electrical system of claim 24 wherein the value of
3 the first digital signal and the value of the second digital signal are the same for at least one
4 half of the first signal path.

1 30. The apparatus of minimizing coupling capacitance interference between a first
2 signal path and a second signal path in an electrical system of claim 25 wherein the value of
3 the first digital signal and the value of the second digital signal are the same for at least one
4 half of the first signal path.

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